

# **Controlling Odors**

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Does your business create odors? More specifically, does the exhaust from your business' operations create objectionable odors? If the Wisconsin Department of Natural Resources' (DNR's) Air Program gets calls from your neighbors about odors from your business, how will you respond? There are requirements in the Wisconsin Administrative Code Air Pollution Rules that state: any source of air pollution must minimize or control any odors that are produced by their activities. What does this rule mean to you?

## What Are the Requirements?

Chapter NR 429 of the Wisconsin Administrative Code, says that no one can create or release any emissions with odors that are considered "objectionable." If a business does cause any objectionable odors, they must control or minimize those emissions to the greatest extent feasible.

There are two tests that the DNR uses to determine when the odors are considered "objectionable." They are:

- When a DNR inspector investigates the area and determines that the odor is objectionable by the nature, intensity, frequency and duration of that odor as well as the type of area involved, or
- When 60% of a random sample of people who are exposed to the odor either in their home or at their workplace in the surrounding neighborhood claim it is objectionable because of the nature, intensity, frequency and duration of the odor.

What is meant by "the nature, intensity, frequency and duration of an odor?" To determine *the nature and intensity*, the DNR inspector would look to answer the following questions: "What is causing the odor? A chemical with hazardous proper-

ties or a natural substance like cow manure?" and "How often is the odor detected? Does it last all day or only for a few minutes?" Once these questions are answered, the DNR inspector would work out the appropriate course of action with the source of that odor. DNR and the business causing the odor will discuss measures to control and/or minimize the odor and how quickly the measures must be implemented.

The answers to those questions are intertwined as well. A short burst of odor whose nature is a chemical with highly toxic affects, would need to be acted on more quickly than an odor that may last all day but is caused by something that is not toxic, like cow manure.

## Will My Business Be Affected?

Any owner or operator of almost any type of business has the potential to be affected by this rule. If anything at your business creates any sort of odor, there is the potential that someone might consider it objectionable and file a complaint with the DNR. Some neighbors are straightforward and will actually contact the business directly before going to the regulatory agency. It is usually **best** to deal with the odors you are creating and/or releasing

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from some part of your operations as soon as someone in the neighborhood contacts you, instead of waiting for DNR to be contacted. If Affected, What Will I Have To Do To Comply?

If your business is the source of objectionable odors, the following control or minimizing measures may apply. The measures required for your business will depend on the nature, intensity, frequency and duration of the odor.

- Use of catalytic incinerators, afterburners, scrubbers, adsorbers, absorbers, or other mechanical methods approved by the DNR. These are most often required for sources of odors caused by chemicals with some toxic nature.
- The removal and disposal of odorous materials.
- The use of methods in handling and storage of odorous materials that minimize emissions.
- Follow prescribed standards in maintenance of premises to reduce odorous emissions.

The last three measures are more likely to be applied to natural sources of odor, like cow manure, but may be applied to industrial sources as well since someone may just have leaky equipment that once repairs and proper maintenance are implemented, operates with minimal odors. Any control measures can only be expected to the extent that it is economically feasible. There are many examples of businesses with odor control measures that have been applied with different levels of success. You will want to consider the success rates and how appropriate the measure is for your operations. DNR would also take this in account when working with you to develop a plan to comply with the rules.

# Tips To Make Compliance Easier

Taking a pro-active approach in reducing or eliminating odors at the source could prevent any complaints being filed in the first place. This could mean:

	Do your own inspection of the plant to see if
you	smell anything. Or use a new employee's
perd	ceptions, since people are often desensitized
to a	n odor after being exposed to it after a period
of ti	me

If you are aware odors are present within or around your building(s), look into adjustments you can make:

- Change materials used in your process.
- Minimize exposure of odor causing materials to open air when handling/processing.
  - Schedule work for odor causing processes so their effect is minimized do them at night if possible, when neighbors are sleeping or students at a nearby school are not present.
- ☐ Working with neighbors to minimize any odors that you share with them will go along way towards minimizing their opposition to any expansions of your business during the permit process.

# Examples of Success Stories

Here are some control measures that have been adopted to minimize or control odors:

- A cheese plant uses products like Ecosorb or Anotec, adsorbent solutions mixed with water and sprayed into the air, and spray the mist around the perimeter of their wastewater treatment operations.
- One company tried ozonating the air, to oxidize volatile organic compounds (VOCs), with little success. Then they raised their stacks to the maximum allowed in the city (58 feet in that case) and solved their problem.
- For a farm, there are best management practices (BMP) that should be followed. USDA (US Department of Agriculture) District Conservationist can be contacted for assistance on BMPs. To find a local Conservationist in Wisconsin, call 608/276-USDA or go to:

www.wi.ncrs.usda.gov/about/office\_search.asp and click on your county.

#### Other Sources of Odors

If it turns out that the odors are coming from a private residence, there are a couple things that may cause it. If the resident is burning materials on their property, then it is likely they are burning prohibited materials like plastics or treated wood which release chemicals that may cause odors.

This is regulated under another rule in the Wisconsin Administrative Code on open burning. See DNR's Web site for information on open burning: www.dnr.state.wi.us/org/aw/air/HOT/BSINMUNI.HTM. DNR compliance inspectors can provide assistance if your own efforts to get the open burning to stop are unsuccessful.

### Contacts for More Information or Assistance.

The Small Business Clean Air Assistance Program helps smaller businesses understand and comply with the Clean Air Act regulations. Contact one of the program's Clean Air Specialists for more assistance: Renée Lesjak Bashel at 608/264-6153 or Tom Coogan at 608/267-9214.



For further information on odors contact your DNR Regional or Service Center office shown on the **DNR Contact Fact Sheet**.